

**Statement of
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before the
Subcommittee on Science, Technology, and Space
Committee on Commerce, Science, and Transportation
United States Senate
June 19, 2002**

Science is all about questions. They may result from the simple curiosity of a preschooler or the investigation of fundamental questions about the origins of the universe. Teachers of science, like myself, are challenged to lead the Nation's children in discovering answers to questions. NASA has been a partner with me as a science teacher in meeting that challenge during 25 years of learning adventures with teenagers in Iowa. NASA's mission and resources were instrumental in providing opportunities to join explorers as they made new discoveries. We were inspired by the excitement of the Mars Pathfinder mission as images came from millions of miles away to our computers. My students became explorers themselves as they were challenged to investigate questions like,

- How can we find out how far an object in space is from the Earth?
- How can we observe a planet's surface that is covered in clouds?
- How do ocean currents affect the climate and weather in Iowa?

The students quickly learned that recent discoveries in science are not found in their textbooks but with information made available through publications, activities and from organizations like NASA. However, NASA is unique in that science is public; the flow of information about new discoveries and images is easily accessed by citizens, educators, and students. I have appreciated the availability of NASA resources through the electronic Spacelink library, through workshops, and from the Educator Resource Centers.

In 1985, I was excited about the possibility of a teacher being sent on the Space Shuttle to teach from space. I was one of the thousands of hopefuls, but the program's message to my students, their parents, and myself, was that education was important and NASA was willing to provide resources and time on the shuttle to connect real science to all students, even those in small town Iowa. I am excited about the recent plans for the Educator Mission Specialist Program. It will provide springboards for education to be involved in the science of NASA.

In 2000, I was chosen as one of 12 Albert Einstein Distinguished Educators from around the nation and was given the choice of several fellowship positions in Washington, DC. I chose NASA because of the enthusiasm and inspiration it generates in educators and students and because I wanted to work in the organization that inspired me to choose science as a career. I have not regretted for one minute my decision to spend my Einstein fellowship working at NASA.

P. Steffen
6/18/2002

NASA's Education program is an evolving one, dedicated to providing effective, meaningful opportunities for the nation's educational communities. I have appreciated the willingness of the NASA family to reach out to the practitioners in the classroom for advice and assistance in response to the needs in translating science and technology. Let me describe a project that demonstrates the responsiveness of the NASA to an idea that was proposed last fall. The NASA-Iowa Connection Project was designed and implemented to bring rich learning experiences to Iowa's educational communities through the state's fiber-optic distance learning system. It has demonstrated how NASA resources can provide extended professional development and student learning based on a theme, in this case, the International Space Station.

Professional development sessions for educators connected Iowa teachers to university and NASA specialists introducing resources and ways to integrate technology. Student sessions brought opportunities for interaction with NASA researchers and university faculty. The staff of the NASA Food Technology Commercial Space Center provided special sessions with astronaut Clayton Anderson. Participating schools received special kits of "Astronaut lunches" for tasting, experimentation, and discussion during the session which was broadcast across the state. Students were able to answer probing inquiries by the presenters, and were able to ask questions of the expert panel about space food, microgravity, and being an astronaut.

One capstone event for students during the project was the Next Generation Space Station Design Challenge, in which middle school student teams were introduced to the process of design. The students worked to develop a design for their vision of the next step in space station habitats. They produced models, a presentation, and diagrams which were shared with other students through the Iowa distance learning network and with the Distance Learning Outpost at NASA Johnson Space Center.

The final event of the Iowa Connection project is a down-link from the International Space Station crew to the Science Center of Iowa next week. Iowa students from the project, Boy Scouts, and 4-H Aerospace students will have a chance to talk to the members of Expedition V as part of a special day of activities highlighting the International Space Station.

What is the impact of NASA's involvement in education through programs like this? I would offer a few quotes from people who were involved in the NASA-Iowa Connection project.

From the teachers:

"This is a great way to get kids thinking."

"This project was valuable in many ways; showed them what they were capable of, gave them a chance to explore/research independently, and do teamwork on an entirely different level."

"This project introduced many of them to the idea of looking into engineering fields."

"We had access to valuable resources and it was a hands-on real-life problem for the students to work on."

From parents:

"Thank you for providing this opportunity for my two sons. Their interest in aerospace was greatly increased."

"Please thank all the persons responsible for funding this project. It shows kids there is more out there to be interested in and to achieve."

From our most important audience, the students in grades 3-8:

This project "gives me another option for a future job. This will help me work harder."

"I learned how to work with a team and divide the work up."

"I learned more about gravity and how you live in space."

"It put an interest in science on me. It made me wonder what I want to be."

Thank you for the opportunity to share the perspective of a teacher. NASA's ability to inspire teachers and their students is powerful. I would like to end with a quote from Blake Meyer's thank you note to Astronaut, Clayton Anderson. "The time you talked to us taught me more than any book every will. I will be watching for you and your crew to one day go up into space. Shoot for the Stars!"